

Notice of Allowability

Application No.

10/785,980

Examiner

Jermaine Jenkins

Applicant(s)

KATSUMATA ET AL.

Art Unit

2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the interview with applicant's representative on 7/19/05.
2. ☒ The allowed claim(s) is/are 2-13.
3. ☒ The drawings filed on 26 February 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>02262004</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT ✓

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Atty. David Posz on 7/19/05.

The application has been amended as follows:

Claim 1 is cancelled.

In regards to claim 2, line 1, delete "The sensor according to claim 1," and insert the following in its place - - A semiconductor pressure sensor comprising: a semiconductor substrate having a diaphragm for receiving pressure and a bridge circuit for detecting distortion of the diaphragm corresponding to the pressure, wherein the bridge circuit includes a pair of first a pair of second gauge resistors, wherein the first gauge resistors are disposed on a center gauge resistors and of the diaphragm, and the second gauge resistors are disposed on a periphery of wherein the diaphragm, and each first gauge resistor has a first resistance, which is larger than a second resistance of each second gauge resistor. - -

In claim 8, line 1, delete "claim 1", insert the term - - claim 2 - -.

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2. The following is an examiner's statement of reasons for allowance: The prior art does not disclose or suggest a semiconductor pressure sensor comprising the bridge circuit having a predetermined ratio of resistance between the second resistance and the first resistance, wherein the diaphragm has another predetermined ratio of thermal stress between a second thermal stress to be applied to the second gauge resistor and a first thermal stress to be applied to the first gauge resistor in a case where a thermal stress is applied to the substrate, and wherein the predetermined ratio of resistance is equal to the predetermined ratio of thermal stress.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- U.S. Patent 6,422,088 (Oba et al) – Sensor Failure or Abnormality
Detecting System Incorporated in a Physical or Dynamic Quantity
Detecting Apparatus
- U.S. Patent 5,419,199 (Araki) – Semiconductor Device Having a Stress
Transducer Driven by a Temperature Compensating Reference Voltage
Source

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- U.S. Patent 5,343,755 (Huss) – Strain Gage Sensor with Integral Temperature Signal
- U.S. Patent 5,289,721 (Tanizawa et al) –Semiconductor Pressure Sensor
- U.S. Patent 5,253,532 (Kamens) – Temperature Compensated Pressure Transducer with Digital Output for Low Voltage Power Supply
- U.S. Patent 5,191,798 (Tabata et al) – Pressure Sensor
- U.S. Patent 5,167,158 (Kamachi et al) – Semiconductor Film Pressure Sensor and Method of Manufacturing Same
- U.S. Patent 5,097,841 (Moriunchi et al) – Disposable Pressure Transducer and Disposable Pressure Transducer Apparatus
- U.S. Patent 4,813,272 (Miyazaki et al) – Semiconductor Pressure Sensor
- U.S. Patent 4,777,826 (Rud, Jr. et al) – Twin Film Strain Gauge System


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermaine Jenkins whose telephone number is 571-272-2179. The examiner can normally be reached on Monday-Thursday 7am-530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jermaine Jenkins
A.U. 2855



EDWARD LEFKOWITZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800